

**[DISCUSSION DRAFT]**

SEPTEMBER 15, 2003

1     **Subtitle \_\_\_\_—Clean Coal Power**  
2                     **Initiative**

3     **SEC. \_\_\_\_1. AUTHORIZATION OF APPROPRIATIONS.**

4             (a) CLEAN COAL POWER INITIATIVE.—There are au-  
5     thorized to be appropriated to the Secretary of Energy (re-  
6     ferred to in this Act as the “Secretary”) to carry out the  
7     activities authorized by this subtitle \$200,000,000 for  
8     each of fiscal years 2004 through 2012, to remain avail-  
9     able until expended.

10            (b) REPORT.—The Secretary shall submit to the  
11     Committee on Energy and Commerce and the Committee  
12     on Science of the House of Representatives, and to the  
13     Senate, the report required by this subsection not later  
14     than March 31, 2005. The report shall include, with re-  
15     spect to subsection (a), a 10-year plan containing—

16                 (1) a detailed assessment of whether the aggre-  
17     gate funding levels provided under subsection (a) are  
18     the appropriate funding levels for that program;

19                 (2) a detailed description of how proposals will  
20     be solicited and evaluated, including a list of all ac-  
21     tivities expected to be undertaken;

1           (3) a detailed list of technical milestones for  
2       each coal and related technology that will be pur-  
3       sued; and

4           (4) a detailed description of how the program  
5       will avoid problems enumerated in General Account-  
6       ing Office reports on the Clean Coal Technology  
7       Program, including problems that have resulted in  
8       unspent funds and projects that failed either finan-  
9       cially or scientifically.

10 **SEC. \_\_\_\_2. PROJECT CRITERIA.**

11       (a) IN GENERAL.—The Secretary shall not provide  
12       funding under this subtitle for any project that does not  
13       advance efficiency, environmental performance, or cost  
14       competitiveness well beyond the level of technologies that  
15       are in commercial service or have been demonstrated on  
16       a scale that the Secretary determines is sufficient to dem-  
17       onstrate that commercial service is viable as of the date  
18       of enactment of this Act.

19       (b) TECHNICAL CRITERIA FOR CLEAN COAL POWER  
20       INITIATIVE.—

21           (1) GASIFICATION PROJECTS.—

22               (A) IN GENERAL.—In allocating the funds  
23               made available under section \_\_\_\_1(a), the Sec-  
24               retary shall ensure that at least 60 percent and  
25               up to 80 percent of the funds are used only for

1 projects on coal-based gasification technologies,  
2 including gasification combined cycle, gasifi-  
3 cation fuel cells, gasification coproduction, coal-  
4 based oxidation technology that would result in  
5 concentrated streams of carbon dioxide, and hy-  
6 brid gasification/combustion.

7 (B) TECHNICAL MILESTONES.—The Sec-  
8 retary shall periodically set technical milestones  
9 specifying the emission and thermal efficiency  
10 levels that coal gasification projects shall be de-  
11 signed, and reasonably expected, to achieve.  
12 The technical milestones shall become more re-  
13 strictive during the life of the program. The  
14 Secretary shall set the periodic milestones so as  
15 to achieve by 2020 coal gasification projects  
16 able—

17 (i) to remove 99 percent of sulfur di-  
18 oxide;

19 (ii) to emit not more than .05 lbs of  
20 NO<sub>x</sub> per million Btu;

21 (iii) to achieve substantial reductions  
22 in mercury emissions; and

23 (iv) to achieve a thermal efficiency  
24 of—

1 (I) 60 percent for coal of more  
2 than 9,000 Btu;

3 (II) 59 percent for coal of 7,000  
4 to 9,000 Btu; and

5 (III) 50 percent for coal of less  
6 than 7,000 Btu.

7 (2) OTHER PROJECTS.—The Secretary shall pe-  
8 riodically set technical milestones for projects not  
9 described in paragraph (1). The milestones shall  
10 specify the emission and thermal efficiency levels  
11 that projects funded under this paragraph shall be  
12 designed to and reasonably expected to achieve. The  
13 technical milestones shall become more restrictive  
14 during the life of the program. The Secretary shall  
15 set the periodic milestones so as to achieve by 2010  
16 projects able—

17 (A) to remove 97 percent of sulfur dioxide;

18 (B) to emit no more than .08 lbs of NO<sub>x</sub>  
19 per million Btu;

20 (C) to achieve substantial reductions in  
21 mercury emissions; and

22 (D) to achieve a thermal efficiency of—

23 (i) 45 percent for coal of more than  
24 9,000 Btu;

1 (ii) 44 percent for coal of 7,000 to  
2 9,000 Btu; and

3 (iii) 40 percent for coal of less than  
4 7,000 Btu.

5 (3) CONSULTATION.—Before setting the tech-  
6 nical milestones under paragraphs (1)(B) and (2),  
7 the Secretary shall consult with the Administrator of  
8 the Environmental Protection Agency and interested  
9 entities, including coal producers, industries using  
10 coal, organizations to promote coal or advanced coal  
11 technologies, environmental organizations, and orga-  
12 nizations representing workers.

13 (4) EXISTING UNITS.—In the case of projects  
14 at units in existence on the date of enactment of this  
15 Act, in lieu of the thermal efficiency requirements  
16 set forth in paragraph (1)(B)(iv) and (2)(D), the  
17 milestones shall be designed to achieve an overall  
18 thermal design efficiency improvement, compared to  
19 the efficiency of the unit as operated, of not less  
20 than—

21 (A) 7 percent for coal of more than 9,000  
22 Btu;

23 (B) 6 percent for coal of 7,000 to 9,000  
24 Btu; or

1 (C) 4 percent for coal of less than 7,000  
2 Btu.

3 (5) PERMITTED USES.—In allocating funds  
4 made available under section \_\_\_\_01, the Secretary  
5 may fund projects that include, as part of the  
6 project, the separation and capture of carbon diox-  
7 ide.

8 (c) FINANCIAL CRITERIA.—The Secretary shall not  
9 provide a funding award under this subtitle unless the re-  
10 cipient documents to the satisfaction of the Secretary  
11 that—

12 (1) the award recipient is financially viable  
13 without the receipt of additional Federal funding;

14 (2) the recipient will provide sufficient informa-  
15 tion to the Secretary to enable the Secretary to en-  
16 sure that the award funds are spent efficiently and  
17 effectively; and

18 (3) a market exists for the technology being  
19 demonstrated or applied, as evidenced by statements  
20 of interest in writing from potential purchasers of  
21 the technology.

22 (d) FINANCIAL ASSISTANCE.—The Secretary shall  
23 provide financial assistance to projects that meet the re-  
24 quirements of subsections (a), (b), and (c) and are likely  
25 to—

1           (1) achieve overall cost reductions in the utiliza-  
2           tion of coal to generate useful forms of energy;

3           (2) improve the competitiveness of coal among  
4           various forms of energy in order to maintain a diver-  
5           sity of fuel choices in the United States to meet elec-  
6           tricity generation requirements; and

7           (3) demonstrate methods and equipment that  
8           are applicable to 25 percent of the electricity gener-  
9           ating facilities, using various types of coal, that use  
10          coal as the primary feedstock as of the date of en-  
11          actment of this Act.

12          (e) FEDERAL SHARE.—The Federal share of the cost  
13          of a coal or related technology project funded by the Sec-  
14          retary under this subtitle shall not exceed 50 percent.

15          (f) APPLICABILITY.—No technology, or level of emis-  
16          sion reduction, shall be treated as adequately dem-  
17          onstrated for purposes of section 111 of the Clean Air Act  
18          (42 U.S.C. 7411), achievable for purposes of section 169  
19          of that Act (42 U.S.C. 7479), or achievable in practice  
20          for purposes of section 171 of that Act (42 U.S.C. 7501)  
21          solely by reason of the use of such technology, or the  
22          achievement of such emission reduction, by 1 or more fa-  
23          cilities receiving assistance under this subtitle.

1   **SEC. \_\_\_\_3. REPORT.**

2       Not later than 1 year after the date of enactment  
3 of this Act, and once every 2 years thereafter through  
4 2011, the Secretary, in consultation with other appro-  
5 priate Federal agencies, shall submit to the Committee on  
6 Energy and Commerce and the Committee on Science of  
7 the House of Representatives, and to the Senate, a report  
8 describing—

9           (1) the technical milestones set forth in section  
10       \_\_\_\_2 and how those milestones ensure progress to-  
11 ward meeting the requirements of subsections  
12 (b)(1)(B) and (b)(2) of section \_\_\_\_2; and

13           (2) the status of projects funded under this  
14 subtitle.

15   **SEC. \_\_\_\_4. CLEAN COAL CENTERS OF EXCELLENCE.**

16       As part of the program authorized in section \_\_\_\_1,  
17 the Secretary shall award competitive, merit-based grants  
18 to universities for the establishment of Centers of Excel-  
19 lence for Energy Systems of the Future. The Secretary  
20 shall provide grants to universities that show the greatest  
21 potential for advancing new clean coal technologies.

22   **SEC. \_\_\_\_5. COAL TECHNOLOGY LOAN.**

23       There are authorized to be appropriated to the Sec-  
24 retary \$125,000,000 to provide a loan to the owner of the  
25 experimental plant constructed under United States De-  
26 partment of Energy cooperative agreement number DE—



1 FC-22-91PC90544 on such terms and conditions as the  
2 Secretary determines, including interest rates and upfront  
3 payments.

4 **SEC. \_\_\_\_6. COAL GASIFICATION.**

5       The Secretary is authorized to provide loan guaran-  
6 tees for a project to produce energy from a plant using  
7 integrated gasification combined cycle technology of at  
8 least 400 megawatts in capacity that produces power at  
9 competitive rates in deregulated energy generation mar-  
10 kets and that does not receive any subsidy (direct or indi-  
11 rect) from ratepayers.

12 **SEC. \_\_\_\_7. INTEGRATED GASIFICATION COMBINED CYCLE**  
13 **TECHNOLOGY.**

14       The Secretary is authorized to provide loan guaran-  
15 tees for a project to produce energy from a plant using  
16 integrated gasification combined cycle technology located  
17 in a taconite-producing region of the United States that  
18 is entitled under the law of the State in which the plant  
19 is located to enter into a long-term contract to sell at least  
20 450 megawatts of output to a utility.

21 **SEC. \_\_\_\_8. PETROLEUM COKE GASIFICATION.**

22       The Secretary is authorized to provide loan guaran-  
23 tees for at least 1 petroleum coke gasification  
24 polygeneration project.